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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/628,254

Filing Date: July 29, 2003

Appelant(s): NEUWALD ET AL.

Bruce H. Bernstein, Reg. No. 29,027 For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 2/22/08 appealing from the Office action mailed 8/29/07.

Application/Control Number: 10/628,254

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(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

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(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings

which will directly affect or be directly affected by or have a bearing on the Board's decision in

the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in

the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

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(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

U.S. Patent Publication 2004/0039800 by Black et al filed 01/03

6980515 Schunk et al 12-05

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the Appellant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the Appellant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 9 and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent Publication 20040039800 by Black et al.

Regarding claim 1, a method of managing connections between a Java 2 enterprise edition (J2EE) application server and a remote common object request broker architecture (CORBA) enterprise information system (Black: pages 5-6, para 60-63; Fig. 5B; tag 540a is the CORBA server; tag 560 is the J2EE server), comprising:

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integrating a resource adapter with the J2EE application server, the resource adapter comprising an encapsulated CORBA interface to the remote CORBA enterprise information system (Black: pages 5-6, para 60-63; Fig. 5A-5B); and

establishing a persistent CORBA connection between the J2EE application server and the remote CORBA enterprise information system (Black: page 6, para 62; Fig 5A-D; page 5, para 53).

Regarding claim 9, a computer readable medium for storing a computer program that manages connections between a Java 2 enterprise edition (J2EE) application server and a remote common object request broker architecture (CORBA) enterprise information system (Black: pages 5-6, para 60-63; Fig. 5B; tag 540a is the CORBA server; tag 560 is the J2EE server; page 8, para 75), the computer readable medium comprising:

an integrating code segment that integrates a resource adapter with the J2EE application server, the resource adapter comprising an encapsulated CORBA interface to the remote CORBA enterprise information system (Black: pages 5-6, para 60-63; Fig. 5B; tag 540a is the CORBA server; tag 560 is the J2EE server; page 8, para 75, 78), and

a persistent CORBA connection establishing code segment that establishes a persistent CORBA connection between the J2EE application server and the remote CORBA enterprise information system (Black: page 6, para 62; Fig 5A-D; page 5, para 53).

Regarding claim 17, a Java 2 enterprise edition (J2EE) compliant application server that hosts a resource adapter for managing connections between the J2EE application server and a remote common object request broker architecture (CORBA) enterprise information system (Black: pages 5-6, para 60-63; Fig. 5B; tag 540a is the CORBA server; tag 560 is the J2EE server; page 8, para 75), comprising:

a processor that implements a customized deployment descriptor for deploying the resource adapter (Black: page 8, para 75), the resource adapter comprising an encapsulated CORBA interface for the remote CORBA enterprise information system, the deployed resource adapter establishing a persistent CORBA connection between the J2EE application server

(Black: pages 5-6, para 60-63; Fig. 5B; tag 540a is the CORBA server; tag 560 is the J2EE server; page 8, para 75, 78) and the remote CORBA enterprise information system (Black: page 6, para 62; Fig 5A-D; page 5, para 53).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2-8, 10-16, 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent Publication 20040039800 by Black et al in view of U.S. Patent No. 6,980,515 by Schunk et al.

Regarding claim 2, the Black reference teaches the method of managing connections according to claim 1.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising receiving a request from an application component implemented by the J2EE application server to allocate the persistent connection and determining whether the persistent connection is available for allocation (Schunk: col. 4, lines 24-30) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 3, the Black reference teaches the method of managing connections according to claim 2.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising allocating the persistent CORBA connection to the application component when a persistent CORBA connection is available, and informing the application component that the CORBA connection is unavailable when the persistent CORBA connection is unavailable (Schunk: col. 8, lines 65- col. 9, line 2; col. 16, lines 56-65) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 4, the Black reference teaches the method of managing connections according to claim 2.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising establishing another persistent CORBA connection between the J2EE application server and the CORBA enterprise information system when the persistent CORBA connection is unavailable, and allocating the other persistent CORBA connection to the application component (Schunk: col. 16, lines 11-35) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 5, the Black reference teaches the method of managing connections according to claim 1.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising receiving a message from the CORBA enterprise information system indicating that the persistent CORBA connection is not active and, in response, terminating the persistent CORBA connection (Schunk: col. 16, lines 22-35) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 6, the Black reference teaches the method of managing connections according to claim 1.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising monitoring the persistent CORBA connection to determine whether the persistent CORBA connection is active (Schunk: col. 24, lines 14-15; col. 6, lines 54-59) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 7, the Black reference teaches the method of managing connections according to claim 1.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising establishing additional CORBA connections between the J2EE application server and the CORBA enterprise information system until a predetermined minimum number of CORBA connections are established (Schunk: col. 16, lines 11-35; users 1 and 2) in order to maintain a high level of

performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Regarding claim 8, the Black reference teaches the method of managing connections according to claim 7.

The Black reference fails to teach determining availability.

However, the Schunk reference teaches, further comprising establishing additional CORBA connections between the J2EE application server and the CORBA enterprise information system until a predetermined maximum number of CORBA connections are established (Schunk: col. 15, lines 64- col. 17, line 24),

wherein a CORBA connection established after the predetermined minimum number of CORBA connections are established, is established based on a determination, in response to a request from an application component implemented by the J2EE application server to allocate a CORBA connection, that the previously established CORBA connections are unavailable (Schunk: col. 16, lines 11-35) in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the method of managing connections as taught by Black to include determining availability as taught by Schunk in order to maintain a high level of performance and availability while minimizing delays and bottlenecks (Schunk: col. 1, lines 30-36).

Claims 10-16 and 18-25 are rejected under the same rationale given above as being substantially similar to claims 1-8. Claims 1-8 are interpreted to be the process and steps of the invention, whereas claims 9-16 are interpreted to be the hardware storing the program for performing the steps of the invention as in claim 1 while claims 17-25 claim the software implemented by a processor for performing substantially the same steps as the method.

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(10) Response to Argument

Applicant focuses arguments on the extremely broad independent claims rejected under 102(e).

1) Appellant on pages 7 and 8 of the appeal brief argue that the Black reference is internally inconsistent by citing Figures 5C/5D as inconsistent with Figures 5A/5B.

In response, the examiner_respectfully submits:

The examiner maintains the rejection and points out that Black teaches multiple embodiments of the prior art invention. Figures 5A-5D explained in the specification teach embodiments directed to overcoming deficiencies associated with bridging between CORBA and EJBs (Black: page 5, para 57). Several of the embodiments repeat teachings that read against appellants broad claim limitations and are useful in the rejection argued below. Such an argument does not invalidate the Black reference or distinguish it from the claim limitations.

2) Appellant argues the rejection on claims 1, 9 and 17 is improper. Regarding claim 1, the appellant argues the individual limitations of the claims.

<u>In response</u>, the examiner_respectfully submits:

The Black reference teaches [the preamble] a method of managing connections between a Java 2 enterprise edition (J2EE) application server and a remote common object request broker architecture (CORBA) enterprise information system (Black: pages 5-6, para 60-63; Fig 5b, 4a). Black's architecture is chiefly concerned with these two entities. As seen in Figure 5B, there is a CORBA server tagged 540a that interfaces with 'instance of EJB' tag 560 interpreted to be the J2EE server per paragraph 63. J2EE is java 2 enterprise edition (see page 3, para 44. EJBs are enterprise java beans directly associated with J2EE. The arrows between the CORBA server and the instance of EJB show the connections. The remote limitation is shown as they are both separate entities here. The Black reference teaches the entities can be combined or remotely distributed (see Fig. 4a) in which there are two middle-tier hardwares each embodying the different entities separately. Black: page 3, para 38 teaches "the server and its various

components may be distributed over a plurality of middle-tier hardware components. In this regard, the server, as a whole, may be seen as residing on a plurality of middle-tier hardware machines." Black page 5, para 54 teaches the Figure 4a where middle tier hardware 310a and 310b exist on separate middle tier hardware. Black page 4, para 47 teach the EJBs are executed on a microprocessor.

Further to enforce the idea that they are separate entities remote from each other and there is an interface, the CORBA server must communicate and connect with the J2EE (EJBs) through a remote interfaces (Black page 4, para 51, halfway down the page) "the CORBA servant object, which is conceptually remotely located, must access the instance of the EJB using the remote interface."

The Black reference teaches [first limitation] integrating a resource adapter with the J2EE application server, the resource adapter comprising an encapsulated CORBA interface to the remote CORBA enterprise information system (Black: pages 5-6, para 60-63; Fig. 5A-5B). The Black reference teaches the remote interface connecting between the CORBA and J2EE servers. The resource adapter is the interface bridging the two modules. The arrows of Figures 5a/5b are bidirectional. Encapsulate is defined as 'to include characteristics or other objects with objects in an object oriented program.' The CORBA server objects call the EJBs to create an instance of the EJB (page 6, para 61-62). This translates the request from CORBA to J2EE (platform independent) for interfacing with the mainframe. Appellant argues more specific limitations than claimed. The claim limitation that the resource adapter is "integrated" is met because Black shows the interface is used by both entities and is not specifically defined within, only with. Pages 5-6, paragraphs 60-63 reinforce the mapping that the CORBA server creates a connection with the J2EE server bridging the connection and interpreting commands between the two.

The Black reference teaches [second limitation] establishing a persistent CORBA connection between the J2EE application server and the remote CORBA enterprise information system (Black: page 6, para 62; Fig 5A-D). As argued above, Black Fig. 4a teaches the CORBA server and J2EE server are remote from each other. The connection between the two entities is apparent (page 6, para 61-63; page 4, para 50-51) where a local or remote interface is made with

the JVM (EJBs and J2EE) to encapsulate the request into Java. Appellant argues the Black reference isn't 'persistent' as claimed. Appellant points to the specification to further define a persistent connection is one that is maintained even when a session ends (instant application specification para 48). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The examiner interprets persistent connections be taught by Black because Black teaches a persistent connection as the connection and interface between the CORBA and J2EE remains for calling (Black: page 5, para 53). Black teaches the connections between the CORBA and J2EE servers remain open for calling and instantiating. Black does not teach away from the limitation by showing closing of connections. The broad term 'persistent' leads the examiner to question the term and bounds of the word. Does the term persistent mean 'always there' regardless of session presence or when no sessions are present at all or does persistent mean 'long enough' to complete the request. Appellant's term is broad and requires further distinction from the art of record.

Regarding claim 9, appellant argues the Black reference doesn't teach a computer readable medium for storing a computer program that manages connections between the J2EE application server and a remote common object request broker architecture (CORBA) enterprise information system. The Black reference page 8, para 75 and 78 teach computer readable mediums such as hard drivers, memory and local storage storing "computer programs that execute the program with the assistance of the memory." The memory is an inherent hardware piece in which the invention runs managing connections between the J2EE and CORBA servers page 6, para 60-63. An integrating code segment that integrates a resource adapter with the J2EE and a code segment that establishes a persistent CORBA connection are the programs that are embodied on page 8, para 75-78 as the code that executes the invention as cited in page 6, para 60-63 and Figures 5A-5D.

Regarding claim 17, appellant argues the Black reference does not teach a J2EE complaint application server that hosts a resource adapter for managing connections between the J2EE server and a CORBA system, and a processor that implements a customized deployment

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descriptor for deploying the resource adapter. The Black reference teaches the hardware in which the invention runs on page 8, para 75-78 and page 3, para 38. Black page 5, para 54 teaches the Figure 4a where middle tier hardware 310a and 310b exist on separate middle tier hardware. Black page 4, para 47 teach the EJBs are executed on a microprocessor. The J2EE complaint server is the instance of EJB cited in Fig. 5b, tag 560 and the CORBA server is tag 540a. The deployment descriptor is interpreted as the software for implementing and establishing the connections between the CORBA and J2EE servers.

3) Appellant broadly argues all the dependent claims rejected under 35 U.S.C. 103(a). **In response**, the examiner respectfully submits:

The examiner maintains the rejections on claims 2-8, 10-16 18-25 with the same rationale as given that there are no new distinct issues or limitations argued.

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(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related

Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Benjamin R Bruckart/ Examiner, Art Unit 215

Conferees:

/saleh najjar/ Supervisory Patent Examiner, Art Unit 2155

Conferees:

/Jason D Cardone/

Supervisory Patent Examiner, Art Unit 2145